SYRKIN, Ya.M.; FRENKEL', M.B.; NOVOSEL'SKIY, L.G.; MEL'NICHENKO, N.P.;
LEVYATOVA, L.I.

Industrial mastering of the production of quick-hardening slag portland cement at the Kharkov Cement Plant. Trudy IUzhgiprotsementa no.4:127-143 '63.
(MIRA 17:11)

PERLI, S.B., kand.tekhn.nauk; MEL'NICHENKO, N.P., inzh.; SHEVEL'KOV, V.G., inzh.; CHANDER, Yu.I., inzh.

Improvement in gas purification in electrostatic precipitators of drying drums. TSement 30 no.6:17-19 N-D '64. (MIRA 18:1)

1. Gosudarstvennyy institut po proyektirovaniyu tsementnykh zavodov v yuzhnykh rayonakh SSSR.

37672
S/125/62/000/004/011/013
D040/D113

1.1110

AUTHORS: Mel'nichenko, N.T., and Mokrov, B.I.

TITLE: Plasma jet cutting attachment for AR-9 welding torch

PERIODICAL: Avtomaticheskaya svarka, no. 4, 1962, 88-89

TEXT: The authors designed, made and industrially introduced a simple plasma jet cutting attachment (Figure) to a common АР-9 (AR-9) torch used for manual argon arc welding with a tungsten electrode. The attachment body (1) is connected to the torch instead of the welding nozzle. Current is fed by a 4 mm² (if bare wire is placed in a rubber pipe with cooling water), or 6 mm² copper wire (without water cooling). Water is fed by a rubber pipe 6-7 mm in inner diameter. The wire and pipes are attached to the torch handle from below. If water pressure is sufficient (over 1 atm), the cooling of the torch proper is switched on in sequence with the cooling of the plasma jet nozzle; at low pressure it is better to switch on the

Card 1/3

S/125/62/000/004/011/013
D040/D113

Plasma jet cutting attachment ...

cooling in parallel. The body (1) is made of М1 (M1) copper; the joints
are soldered with ПСР-40 (PSR-40) silver solder. The connecting thread
and taper must be finished after soldering the blanks. The replaceable
nozzle (2) is also made of M1 copper. Its advantages compared to the
VNIIESO, IMET and ГП-1 (GP-1) nozzles are: simplicity of shape, no thread,
small quantity of metal needed, simple in assembly, no sealings. This is
achieved by placing the cooling system in the body only, without connecting
it to the nozzle. The nozzle is ground into the body and pressed on with a
brass or bronze nut. A nozzle with this cooling system works for a long
time without overheating at 100 amp current in the electrode-nozzle circuit,
and 250-300 amp in the electrode-work circuit. Practically, cutting by
penetrating arc requires not more than 40 amp for the auxiliary arc be-
tween the electrode and the nozzle. Current is supplied from two series-
connected welding generators, ПС-300 (PS-300) or ПС-500 (PS-500). The
auxiliary arc is ignited from an ОСПЗ-2М (OSPZ-2M) oscillator which is
switched off by a current relay after the arc has been ignited. Pure argon
is fed into the torch during ignition, and commercial argon or commercial
argon with hydrogen during operation. The centering accuracy of the tung-

Card 2/3

Plasma jet cutting attachment ...

S/125/62/000/004/011/013
D040/D113

sten electrode depends on the fabrication accuracy of the insulating bushing (3). The centering of the electrode and the width of the electrode-nozzle space is checked by switching on the oscillator. The spark must arc over the gap evenly from all sides. A washer (4) of larger diameter prevents disruptive discharge between the torch body and the plasma jet attachment. The torch is light in weight, handy and dependable. It can be used for cutting stainless steel up to 30 mm thick and aluminum alloys up to 40 mm thick. There is 1 figure. Abstracter's note: Essentially complete translation.

X

Card 3/3

S/135/62/000/007/004/010
A006/A101

AUTHOR: Mel'nichenko, N. T., Engineer

TITLE: Redesign of welding torch АР-9 (AR-9)

PERIODICAL: Svarochnoye proizvodstvo, no. 7, 1962, 31

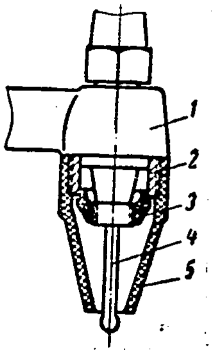
TEXT: The AR-9 welding torch was redesigned by replacing its asbestos-cement bushing by a fluoro-plastic one, or by substituting the metal tip by a ceramic one. The fluoro-plastic bushing can be compact or assembled of 3 - 6 mm thick sheets. This bushing has, in comparison to an asbestos-cement part, higher mechanical strength and electric resistance without changing the heat resistance of the tip. The use of a ГРАД-400 (GRAD-400) type ceramic tip eliminates practically all defects of the torch. The redesigned torch is illustrated. To replace the tip a copper or brass bushing is fixed to the torch body (1). This eliminates gas flaw and assures cooling of bushing 2, clamping nut 3, tungsten electrode 4 and ceramic tip 5. There are 3 figures.

Card 1/2

S/135/62/000/007/004/010
A006/A101

Redesign of welding torch AP-9 (AR-9)

Figure 3. Torch with a ceramic tip



Card 2/2

MEL'NICHENKO, N.T. (Leningrad); MOKROV, B.I. (Leningrad)

Mobile laboratory with a helium leak detector.
Avtom.svar. 15 no.10:81-84 O '62. (MIRA 15:11)
(Welding—Testing)

MEL'NICHENKO, N.T. (Leningrad); MOKROV, B.I. (Leningrad)

Universal equipment for semiautomatic welding in assembly plants. Avtom. svar. 15 no.12:66-68 D '62. (MIRA 16:2)
(Electric welding—Equipment and supplies)

MEL'NICHENKO, N.T., inzh.

Modernizing an AP-9 torch. Svar.proizv. no.31 Jl '62.
(MIRA 15:12)
(Electric welding--Equipment and supplies)

45406
S/125/63/000/001/008/012
A006/A106

1,2300

AUTHORS: Mel'nichenko, N. T., Mokrov, B. I. (Leningrad)

TITLE: Portable machine for welding aluminum

PERIODICAL: Avtomaticheskaya svarka, no. 1, 1963, 80 - 81

TEXT: An assembly organization has developed and manufactured a portable УРС -62А (URS-62A) machine for argon-arc welding aluminum on the site. It can also be used to weld ferrous metals with consumable electrode on a-c. The unit consists of a welding transformer; a ballast rheostat; a high-frequency throttle; a gas system; a reductor; a rotation meter; an electric valve and hoses; a torch cooling system; an extension oscillator; a drum with a feed cable; a panel bearing the control devices and special boxes for materials. The unit is power-supplied from a 220/380 v network and is ground-connected by an extension welding cable. The h-f throttle, protecting the transformer against h-f current from the oscillator, and the ballast rheostat are connected in series into the welding circuit. If the unit is completed by transformers a knife-switch shunts the rheostat and the throttle during welding with a consumable electrode. The welding

Card 1/2

Portable machine for welding aluminum S/125/63/000/001/008/012
A006/A106

conductors can be extended to 30 m by using a portable oscillator. A redesigned AP-9 (AR-9) torch with a ceramic nozzle is being used. The unit operates satisfactorily under difficult field conditions. The weld joints show good quality. There is 1 figure.

SUBMITTED: April 28, 1962

Card 2/2

MEL'NICHENKO, N.T., inzh.; VOLCHKOV, V.G., inzh.

Reliability of TS-500 welding transformers. Svar. proizv. no.11:46-47 N'63. (MIRA 17:5)

MEL'NICHENKO, N.T. (Leningrad); MOKROV, B.I. (Leningrad)

Mobile welding shop. Avtom. svar. 16 no.6:69-72 Je '63.
(MIRA 16:7)
(Electric welding--Equipment and supplies)

SHASHKOV, A.N., kand.tekhn.nauk; MEL'NICHENKO, N.T., inzh.; KIREYEV, N.P., inzh.

Consultations on questions asked in our readers' letters. Svar.proizv. no.10:48 O '64. (MIRA 18:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov (for Shashkov).

MEL'NICHENKO, O. [Mel'nychenko, O.] (selo Kriklivets', Krizhopil'skogo rayonu, Vinnits'koi oblasti)

Prosperity of the villag of Kriklivets. Sil' bud. 7 no.6: 3-4 Je '57. (MIRA 13:3)

(Kriklivets--Farm buildings)

TYLKIN, M.A., kand. tekhn. nauk; MEL'NICHENKO, G.P., inzh.; ZASPITSKIY, N.A., inzh.

Heat resistance of hard-faced cores of cranes equipped with crablike tongs. Svar. proizv. no.5:14-16 My '64. (MIRA 18:11)

1. Metallurgicheskiy zavod imeni Dzerzhinskogo.

MEL'NICHENKO, P.

Mel'nichenko, P. "The originator of the collective-farm movement" (Chairman of the collective farm imeni Budennyy, M. A. Posmitnyy, Berezovskiy Rayon, Odessa Oblast. Outline.), In the collection: Ogni Chernomor'ya (Odessa), 1948, p. 118-29.

So: U-3261, 10 April 53, (Letopis 'Zhurnal 'nykh Statey, No. 14, 1949).

LYUBIMOV, Ye. A., inzh. (Khar'kov); MEL'NICHENKO, P. A., inzh. (Khar'kov)

It is possible to prevent tie damage caused by spike holes.
Put' i put. khoz. 6 no.8:30-31 '62. (MIRA 15:10)

(Railroads--Ties)

MEL'NICHENKO, P.A., inzh.; MCHEDLOV-PETROSYAN, O.P., doktor tekhn. nauk,
prof.

Contact strength and its relation to the active surface of fillers. Sbor. trud. VNIINerud no.4:59-67 '65. (MIRA 18:11)

1. Khar'kovskiy institut inzhenerov transporta.

Mel'nichenko, S D

KHAL'KOVTSEV, G.N.; SHOLOKHOV, V.F.; KAPLAN, A.S.; SLAVKIN, V.S.; YAVNILOVICH, Ye.A.; MEL'NICHENKO, S.D.; SMIRNOV, V.A.; MATYUSHINA, N.V., redaktor; GORDIYENKO, V.K., redaktor; ROZENTSVEYG, Ya.D., redaktor izdatel'stva; BERLOV, A.P., tekhnicheskiy redaktor

[Reference manual for State standards and technical specifications for ferrous metals] Spravochnik po gosudarstvennym standartam i tekhnicheskim usloviiam na chernye metally. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1956. 567 p. (MIRA 10:7)

1. Russia (1923- U.S.S.R.) Ministerstvo chernoy metallurgii. (Iron--Standards) (Steel--Standards)

BOLDIN, K.M. (Yaroslavl'); DROZDOVA, Z.S.; LEVIN, R.I.; VAYSMAN, L.A. (Kuybyshev-obl.); PODOSINOVSKIY, V.V.(Kazan'); SAYFULLINA, Kh.M. (Kazan'); BUSYGIN, N.V.(Kazan'); RAZUMOVSKIY, Yu.K.(Leninogrosk); GEL'FER, G.A., dotsent (Gor'kiy); MAMISH, M.G.(Kazan'); RAFALOVICH, M.B., dotsent; MEL'NICHUK, S.P., kand.med.nauk; KRAPIVIN, B.V.; STAROVEROV, A.T. (Saratov); SURIN, V.M.; POROSENKOV, V.S.(Romodanovo, Mordovskoy ASSR); ANDROSOV, M.D.(Moskva); ZARIPOV, Z.A.(Urussu, Tatarskoy ASSR); MURAV'YEV, M.F.(Izhevsk); KUZ'MIN, V.I.(Batyrevo, Chuvashskoy ASSR); SITDYKOV, E.N.(Kazan'); YUDIN, Ya.B.(Novokuznetsk)

Short reports. Kaz.med.zhur. no.4:81-91 Jl-Ag '62. (MIRA 15:8)
(MEDICINE--ABSTRACTS)

MEL'NICHENKO, V., inzh.

For a radical change in the system of planning and organizing ship repair. Mor. flot 18 no.7:13-14 Jl '58. (MIRA 11:7)

1. Kanonerskiy sudoremontnyy zavod.
(Ships--Maintenance and repair)

SMIRNOVA-ZAMKOVA, A.I.; MEL'NICHENKO, V.D. (Kiyev)

Problem of the pathology of noncellular structures and of "collagen diseases." Vrach.delo no.6:561-566 Je '59. (MIRA 12:12)

1. Otdel patomorfologii (zav. - akademik AN USSR A.I. Smirnova-Zamkova) Ukrainskogo nauchno-issledovatel'skogo instituta klinicheskoy meditsiny im. akademika N.D. Strazhesko.
(MUCOIDS) (COLLAGEN DISEASES)

MEL'NICHENKO, G.V. [Mel'nychenko, H.V.]; MEL'NICHENKO, V.D. [Mel'nychenko, V.D.]

Development of the theory concerning the basic argyrophil substance in the works of Academician O. I. Smyrnova-Zamkova of the Academy of Sciences of the Ukrainian S.S.R. Fiziol zhur. [Ukr.] 9 no.4:520-525 Jl-Ag '64. (MIRA 17:10)

1. Institut fiziologii im. Bogomol'tsa AN UkrSSR i Ukrainskiy nauchno-issledovatel'skiy institut klinicheskoy meditsiny im. Strazhesko, Kiyev.

M

COUNTRY :
CATEGORY :

ABS. JOUR. : RZBiol., No. 21,1958, No. 95925

AUTHOR :Kudzin,Yu.K.; Mel'nichenko,V.F.
INST. :All-Union Sci.Res. Inst. of Corn
TITLE :The Effect of Pre-Planting Irrigation on the Protein Content of Wheat Grain in Southern Ukrainian SSR

ORIG. PUB. :Byul.Vses.n.-i.in-ta kukuruzy, 1957, No.1, 33-37

ABSTRACT : An analysis is made of the spring wheat grain from the irrigated plots in southern UkrSSR. The quality of the grain under conditions of irrigation is reduced through higher percentages of mealy grain in the harvest. By combining the pre-planting or waterlogging irrigation with fertilizer placement, it is possible to avoid the reduction of protein content in the grain. An especially promising method of increasing both the size and quality of the

CARD: 1/2

CATEGORY :

ABS. JOUR. : RZBiol., No.21, 1958, No. 95925

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : grain yield when pre-planting or waterlogging irrigation is used on chernozem or chestnut soils is the application of higher rates of granulated P_c in the rows.--N.F. Kravtsova

CARD: 2/2

KUDZIN, Yu.K., kand. sel'skokhozyaystvennykh nauk; MEL'NICHENKO, V.F.

Effect of various types of fertilizer on the protein content of wheat in the steppe region of the Ukraine. Dokl. Akad. sel'khoz. 23 no.7:31-34 '58. (MIRA 11:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kukuruzy. Predstavlena akademikom B.P. Sokolovym.
(Ukraine—Wheat) (Proteins)

MEL'NICHENKO, V. F., Cand Agr Sci, "Effect of ~~the~~ methods of cultivating wheat in the steppes of the UkSSR upon ~~on the~~ protein content in the grain." Khar'kov, 1961. (Min of Agr UkSSR, Khar'kov Order of Labor Red Banner Agr Inst im V. V. Dokuchayev). (KL, 3-61, 226).

MEL'NICHENKO, V.F., nauchnyy sotrudnik

How the time of planting affects the protein content of winter wheat in the Ukrainian steppe region. Visnyk sil'hosp.nauky 4 no.8:99-100 Ag '61. (MIRA 14:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kukuruzy.
(Ukraine—Wheat) (Planting time)

MEL'NICHENKO, V.F.

Calcium and magnesium in the corn plant. Agrokhimiia no.4:150-155 Ap '64. (MIRA 17:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kukuruzy, Dnepropetrovsk.

L 13288-66 EWT(d)/EWT(m)/EWP(v)/EWP(j)/T/EWP(k)/EWP(h)/EWP(1) RM

ACC NR: AP6000321 (A) SOURCE CODE: UR/0286/65/000/021/0010/0010

INVENTOR: Belotelov, N. A.; Verkhorubov, B. A.; Kal'noy, V. G.; Kryuchkov, A. D.; Klebanova, I. Litvin, A. P.; Mel'nichenko, V. Z.; Morozov, G. N.; Olerinskiy, B. I.; Shchutskiy, S. V.; Yanovskiy, S.; Solnyshkin, L. M.; Fridman, A. N.; Shilov, L. A.; E. A.

ORG: none

15 14 1

TITLE: A device for automatic control of an installation for polymerizing gaseous olefins. Class 12, No. 175923 [announced by the Leningrad Affiliate of the All Union Scientific Research and Design Institute for Chemical Machine Building (Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo i konstruktorskogo instituta khimicheskogo mashinostroyeniya)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 21, 1965, 10

TOPIC TAGS: polymerization, olefin, chemical engineering, automatic control equipment

ABSTRACT: This Author's Certificate introduces a device for automatic control of an

UDC: 66.05-5 : 66.095.26 : 678.742.2

Card 1/3 2

L 13288-66

ACC NR: AP6000321

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installation for polymerizing gaseous olefins, e.g. in production of low pressure polyethylene. The unit consists of two temperature controllers connected to a flow regulator for the product reactor, and a pressure regulator connected to the controller for the coolant. For increased productivity and optimization of the process, one temperature controller is connected through a speed reducer to the pressure controller which is connected through a second speed reducer to the flow regulator for the product reactor. The other temperature controller is connected to the flow regulator for the coolant.

Card 2/3

L 13288-66

ACC NR: AP6000321

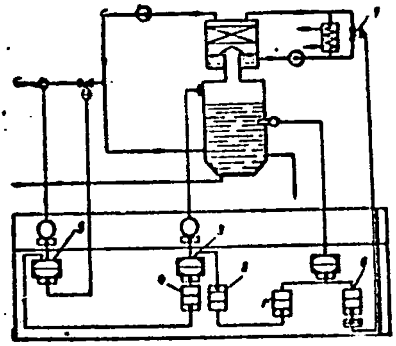

Fig. 1. 1 - first temperature controller; 2 - first speed reducer; 3 - pressure regulator; 4 - second speed reducer; 5 - flow regulator for the product; 6 - second temperature controller; 7 - flow regulator for the coolant.

SUB CODE: 07/ SUBM DATE: 01Feb65/

Card 3/3

MEL'NICHENKO, V.M., inzh.

Methane blower control in the workings of newly built mines.
Shakht.stroi. 5 no.12:10-13 D '61. (MIRA 14:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut organizatsii i mekhanizatsii shakhtnogo stroitel'stva.
(Mine gases)

MEL'NICHENKO, V.M., starshyi naukovyy spivrobitnik

Machinery for boring collector wells. Mekh. sil'. hosp. [9] no.5: 30-31 My '58. (MIRA 11:6)

1.Ukrainskaia mashinoviprobuval'na stantsiya.
(Boring machinery) (Wells)

MEL'NICHENKO, V.M. [Mel'nychenko, V.M.], starshiy nauchnyy rabotnik

The TSM-7.5 conveyer. Mekh. sel'. hosp. 9 no.9:20 S '58.
(MIRA 11:10)

1. Ukrainskaya mashinno-ispytatel'naya stantsiya.
(Conveying machinery) (Ensilage)

KAS'YANENKO, V.D.; MEL'NICHENKO, V.M.

Mounted machinery used in growing grain crops. Mekh. sil'. hosp. 10 no.3:30-32 Mr '59. (MIRA 12:6)

1. Ukrainskaya mashinno-ispytatel'naya stantsiya.
(Agricultural machinery)

GOROBETS, G.K.; MEL'NICHENKO, V.M.

Using the 334M unit for surface hardening of parts. Mashinostroenie no.5:39 S-O '63. (MIRA 16:12)

MEL'NICHENKO, Vladimir Mikhaylovich [Mel'nychenko, V.M.]; LUPKO,
A.Ya., red.; CHEREVATSKIY, S.A.[Cherevats'kyi, S.A.],
tekhn. red.

[Effectiveness of the new technology of corn production]
Efektyvnist' novoi tekhnologii vyrobnytstva kukurudzy.
Kyiv, Derzhsil'hospvydav URSR. 1963. 99 p.
(MIRA 17:3)

MEL'NICHENKO, V.N.

Electrocardiographic data in closed heart injury. Zdravookhranenie 3 no. 5:61-62 S-O '60. (MIRA 13:10)

1. Iz Respublikanskoy bol'nitsy (glavnyy vrach T.V. Moshnyaga).
(ELECTROCARDIOGRAPHY) (HEART—WOUNDS AND INJURIES)

VORONOV, M.A.; KHORUZHENKO, M.V.; KARASEV, Ye.A.; BELYY, V.A.; LIVSHITS, G.A.; VOROPAYEV V I.; GONSKIY, G.V.; MEL'NICHENKO, V.P.; MOLCHANOV, M.A.; GLYBIN, B.V.; NAVAGIN, Yu.S.; RAKOYED, A.I.; PETRIKOV, V.G.

Soviet inventions in the machinery industry. Vest.mashinostr. 46 no.1:85-86 Ja '66. (MIRA 19:1)

ACC NR: AT7004468 SOURCE CODE: UR/2834/66/051/001/0105/0110

AUTHORS: Bokiy, Vyach. B.; Mel'nichenko, V. P.; Fridlyand, A. M.

ORG: none

TITLE: Determining ultimate strength of rocks in coal mines

SOURCE: Leningrad, Gornyy institut. Zapiski, v. 51, no. 1, 1966, 105-110

TOPIC TAGS: mining engineering, ultimate strength, coal

ABSTRACT: The possibility and suitability of determining ultimate strength of rocks by a standard hammer (as used for determining strength of concrete) was investigated. This is done by placing a template (with spherical feet) against the sample and striking it with a hammer. The diameter of the impression made in the sample is measured and compared with that in a standard rod. Tests with this technique prove very satisfactory, but only rocks at the surface of a working may be measured. The authors designed a tubular device for measuring rock strength in small drill holes extending as much as 2 m into the rock. The inner diameter of this tube is 25 mm and the length is 2460 mm. A hammer head within the tube is activated by a strong spring and may be released to strike the base plate of a spring-mounted standard rod at the end of the tube. The other end of the standard rod is against a spherical standard hammer, which in turn is against the rock at the end of the hole. The

Card 1/2

UDC: 622.831

ACC NR: AT7004468

blow transmitted by the rod forces the spherical hammer into the rock, forming impressions in the rock and, on the opposite side of the spherical hammer, in the end of the rod as well. The diameter of this impression may be measured when the device is removed from the hole, and, since this depression is proportional in size to that in the rock, the rock strength may be determined. This is usually read directly from a graph obtained when calibrating the rod. The need for more accurate determinations of ultimate compressive strength is not eliminated, but these techniques will permit a great amount of information to be gathered quickly, for an entire mine or even the whole coal field, facilitating mine operation as well as reducing cost. Orig. art. has: 6 figures, 1 table, and 4 formulas.

SUB CODE: 08/ SUBM DATE: none/ ORIG REF: 003

Card 2/2

KURKCHI, M.F.; MEL'NICHENKO, Ye.D. [Mel'nychenko, IE.D.]

Extracurricular work of 3d course students at the Faculty of Natural Sciences. Nauk. zap. ChDPI 8:23-26 '56. (MIRA 11:2)
(Natural history--Study and teaching)
(Cherkassy--Teachers, Training of)

MEL'NICHENKO, Ye.L.; KAGAN, I.S.; GOL'DENBERG, M.Ya.; KAMNEVA, Z.P.; SIZOVA, A.G.

Flow diagram of the manufacture of fruit juices. Kons.i ov.prom. 15 no.11:14-15 N '60. (MIRA 13:10)

1. Ukrainskiy nauchno-issledovatel'skiy institut konservnoy promyshlennosti.

(Fruit juices)

MEL'NICHENKO, Ye.L.; BERSHADSKIY, G.Yu.; ZHVALEVSKIY, A.S.

New method for the sealing of glass containers. Kons. i ov. prom. 18 no.12:18-20 D '63. (MIRA 17:1)

1. Ukrainskiy nauchno-issledovatel'skiy institut konservnoy promyshlennosti.

MEL'NICHENKO, Ye.L. [Mel'nychenko, IE.L.]; KIRILLOVA, A.A.
[Kyrylova, O.O.]

Causes of the excess breakage of glass containers. Khar. prom. no.1:80-82 Ja-Mr '65. (MIRA 18:4)

66516
SOV/137-59-7-15789

18.1120

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 7, p 228 (USSR)

AUTHORS: Geller, Yu.A., and Mel'nichenko, Ye.V.

TITLE: The Effect of Annealing on Red Hardness of High-Speed Steel

PERIODICAL: V sb.: Konstruktsiya rezhushchikh instrumentov i tekhnol. ikh izgotovleniya, Nr 4, Moscow, 1958, pp 36 - 46

ABSTRACT: Information is given on experimental investigations into red hardness of high-speed "R9" and "R18" steels. It was proved that extended heating (>20 - 30 hours) within a range of 700 - 900°C reduced red hardness and cutting properties of high-speed steels. It is recommended to carry out annealing at minimum temperatures, to reduce annealing time partially by reducing the charge and to reduce in high-speed steel production the number of intermediate and extended heatings within a range of 700 - 900°C as far as possible. 11 bibliographic titles.

4

I.B.

Card 1/1

GELLER, Yu.A., prof., doktor tekhn. nauk; MEL'NICHENKO, Ye.V., inzh.

Effect of the duration and temperature of annealing on the properties of high-speed steel. Stal' 24 no.12:1123-1125 D '64.
(MIRA 18:2)

SOV/137-58-10-21622

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 167 (USSR)

AUTHORS: Geller, Yu.A., Mel'nichenko, Ye.V., Onishchik, Ye.I.

TITLE: The Role of Carbide Transformations in High-speed Steel Heated Into the A_1 Temperature Range (O roli karbidnykh prevrashcheniy v bystrorezhushchey stali pri nagreve vblizi oblasti A_1)

PERIODICAL: Metallovedeniye i term. obrabotka. Moscow, Metallurgizdat, 1958, pp 132-148

ABSTRACT: The effect of annealing time and temperature on properties of steel was studied on four separate smeltings of high-speed steel with different compositions (smelting 1 included the carbides Fe_2W_2C, $Cr_{23}C_6$, and VC; smelting 2 the carbides Fe_2W_2C and VC; smelting 3 the carbide Fe_2W_2C; and smelting 4 the carbide Fe_2W_2C with some positions in the lattice being replaced by Cr). It was established that an increase in anneal time produces transformations in the carbide phase and impairs the properties of the steel. The unstable carbide Fe_2W_2C is transformed into stable carbides WC and Fe_3C. During heating

Card 1/3

SOV/137-58-10-21622

The Role of Carbide Transformations in High-speed Steel (cont.)

of steel for hardening purposes the WC does not dissolve and the solid solution contains insufficient amounts of W; as a result, the hardness and red-shortness stability of the steel are impaired. The process of transformation of the metastable carbides Fe_2W_2C and WC is not reversible. Cr and small quantities of V tend to replace W atoms in the complex carbide Fe_2W_2C thus increasing its stability and inhibiting the formation of WC, which, in turn, increases the resistance of steel to red-shortness, this latter property is not directly affected by Cr or V. Introduction of Cr improves the hardenability of the steel. Cr-free steel exhibits a somewhat lower hardness after tempering (55-57 R_C instead of 63). Increasing the annealing time of a steel containing Cr and V, or V only, has no effect on its hardness nor on its resistance to red-shortness; in the case of a steel containing no Cr or V, the R_C value is reduced from 55-57 to 50. Increasing the anneal time to 100 hours increases the hardness of a steel which contains neither Cr nor V to an R_C of 65-66, and the hardness of steel containing V only to an R_C of 60. The authors explain this fact by the decomposition of the Fe_2W_2C into WC and Fe_3C and by the dissolution of the latter in a solid solution. Increasing the temperature and the time of anneal reduces the hardness (by two units) and impairs the cutting properties of steel that had been heated repeatedly to

Card 2/3

SOV/137-58-10-21622

The Role of Carbide Transformations in High-speed Steel (cont.)

600°C. It is recommended that the temperature of anneal be lowered to 820-850° and that the soaking time, as well as the number of intermediate and prolonged heatings into the A_1 region, be reduced in order to increase the red-shortness stability of the steel.

F.U.

1. Tool steel--Transformations 2. Tool steel--Temperature factors 3. Tool steel --Mechanical properties

Card 3/3

MEL'NICHENKO, Z. A.

Mel'Nichenko, Z. A. - "Toward an evaluation of the effect of field protection strips in the Central Volga region on agricultural plants", Uchen. zapiski Gor'k. Gos. un-ta, Issue 14, 1949, p. 255-85, - Bibliog: 21 items.

SO. U-4631, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 24, 1949).

MEL'NICHENKO, Z. A.

Mel'Nichenko, Z. A. "The water supply of the sunflower
under the conditions prevailing in the forest protective
strips of theTrans-Volga region", Ucher. zapiski Gor'k.
gos. un-ta, Issue 14, 1949, p. 20[illegible]-303, - Bibliog: 14 items.

SO: U-4631, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 24, 1949).

Mel'nichenko, Z.A.

✓ Oxidation-reduction processes in the leaves and roots of plants. Z. A. Mel'nichenko. *Uchenye Zapiski Gor'kovsk. Univ.* 1954, No. 26, 77-86; *Referat. Zhur., Khim., Biol. Khim.* 1955, No. 3183.—A study of the oxidation-reduction potentials of catalase, peroxidase, dehydrogenases, and of iodine-reducing substances of the leaves, roots, and fruits of a variety of plants. B. S. Levine

MELNICHENKO, Z.A

The effect of boron on the vitamin C content in feed plants. Z. A. Mel'nichenko and G. G. Dvornikova. *Uckenye Zapiski Gor'kovsk. Univ.* 1954, No. 25, 87-94; *Referat. Zhur. Khim., Biol. Khim.* 1955, No. 4632.—In the leaves of plants fertilized with nitrate N to which was added B at the rate of 0.5 mg./kg., vitamin C was increased, but not when NH_4^+-N was used. It is postulated that B affects favorably the oxidation-reduction processes of the plant cells and changes the activity relation between catalase, peroxidase, and other enzymes of the plant. B. S. L.

①

L 50751-65

ACCESSION NR: AP5015350

UR/0286/65/000/009/0096/0096

681.142.644.2

15

B

AUTHOR: Tsvetov, Yu. N.; Mel'nichikhin, V. P.; Nikanorov, Yu. V.

TITLE: A computer for determining the length of a vector. Class 42, No. 170767

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 96

TOPIC TAGS: computer, vector analysis, resonant amplifier, cathode follower

ABSTRACT: This Author's Certificate introduces a computer for determining the length of a vector from the rectangular coordinates of its ends. The device isolates the first harmonic of the vector sum of am pulses shifted in phase by one quarter of a period. The unit contains flip-flops and a resonance amplifier. The circuit is simplified and coordinate subtraction is provided by using diode ring modulators. The carrier inputs of the modulators are connected to the flip-flops and the modulated inputs are connected to voltage sources which are proportional to the coordinates of the beginning and the end of the vector. The outputs of the modulators are connected through cathode followers to the resonance amplifier.

ASSOCIATION: none

Card 1/3

PERESYPKIN, Vladimir Fedorovich; DOLIN, Vladimir Gdalich;
YEFIMOV, Gendrikh Aleksandrovich; LOBOV, Viktor
Pavlovich; LOPATIN, Valentin Matveyevich;
MEL'NICHUK, Aleksandra Semenovna; CHERNOV, N.P.,
red.

[Present-day chemical means for plant protection (pesticides)] Sovremennye khimicheskie sredstva zashchity rastenii (pestitsidy). Kiev, Urozhai, 1964. 345 p. (MIRA 18:1)

MEL'NICHUK, A. N.

20848. Mel'nichuk, A. N. Sroki i glubina vspashki travyango polya (v sevooborote) v rayonakh svekloseyaxiiya. Sbornik nauk rabot (Vsesoyuz. Nauch. -issled. in-t sakhar. svekly). Kiyev-khar'kov, 1948, s. 95-106.

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949.

MEL'NICHUK, A. N.

25799

Sroki i glubina vspashki travyanogo polya v rayonakh sveklosevaniya. Sov. agronomiya. 1949, No. 8. s. 55-56

SO: Letopis' No. 34

COUNTRY : USSR M
CATEGORY : Cultivated Plants - Industrial, Oleiferous, Sugar.

[illegible] : RZhBiol., No.14, 1958, No.63508

AUTHOR : Mel'nichuk, A. N.
INST. : -
TITLE : Shallow Plowing of Stubble - An Important Method in Raising Yields.

ORIG. PUB. : Sakharnaya svekla, 1957, No. 7, 42-44

ABSTRACT : On the basis of the data of a number of experiment stations the significance was demonstrated of shallow plowing of stubble for the conservation of moisture in the soil, control of weeds, decomposition of post-harvest residues, destruction of pests and stimulators of the diseases of agricultural plants in the regions of beet-planting zone. Shallow plowing with a sound loosening of the soil, carried out at the proper time, increases the yield of sugar beets by 20-30 c/ha. In those cases when shallow plowing is not performed simultaneously with harvesting of cereal crops, the best tool for shallow plowing is the plowshare type of

Card: 1/2

Card: 2/2

114

MEL'NICHUK, A.N., kand.sel'skokhoz.nauk

Soil cultivation practices in crop rotations which include sugar beets. Zemledelie 7 no.7:34-42 Jl '59. (MIRA 12:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sakharnoy svekly.
(Tillage) (Sugar beets)

BUZANOV, I.F.; SAMBUROV, V.I.; YEMETS, G.M.; ORLOVSKIY, N.I.;
NEGOVSKIY, N.A.; FEDOROV, A.I.; GREKOV, M.A.; KURBATOV,
S.T.; MEL'NICHUK, A.N.; TONKAL', Ye.A.; GORNAYA, V.Ya.;
ROZHDESTVENSKIY, I.G.; SIDOROV, A.A.; KUDARENKO, F.F.;
BROVKINA, Ye.A.; GELLER, I.A.; DOBROTVORTSEVA, A.V.;
VARSHAVSKIY, B.Ya.; KUTSURUBA, N.V.; KUZ'MICH, S.I.;
PRESNYAKOV, P.V.; USHAKOV, A.F.; SHEVCHENKO, V.N.;
KHUCHUA, K.N.; PETRUKHA, Ye.I.; POZHAR, Z.A.; SHAPOVALOV,
P.T.; AREF'YEV, T.I.; GRIGOR'YEVA, A.I., red.; BALLOD,
A.I., tekhn. red.

[Sugar beets] Sakharnaia svekla. Moskva, Sel'khozizdat,
1963. 487 p. (MIRA 16:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sakharnoy svekly. 2. Nauchnyye sotrudniki Vsesoyuznogo nauchno-issledovatel'skogo instituta sakharnoy svekly (for all except Grigor'yeva, Ballod).

(Sugar beets)

Name: **MEL'NICHUK, A. S.**

Dissertation: Treatment of soil with benzene hexachloride in controlling weevil larvae in fruit nurseries

Degree: Cand Agr Sci

Defended at ~~Affiliation~~: Min Agriculture USSR, Belotserkov Agricultural Inst

Publication ~~Defense~~ Date, Place: 1956, Kiev

Source: Knizhnaya Letopis', No 51, 1956

USSR / Weeds and Weed Control N

Abs Jour: Ref Zhur-Biol., 1958, No 17, 77955

Author : Mel'nichuk, A. S.
Inst : Not given
Title : Chemical Measures for the Control of Weeds in the Ukraine.

Orig Pub: Zashchita rast. ot vredit. i bolezney, 1956, No 4, 33

Abstract: In the kolkhozes of the Chernigovskaya oblast, during spraying of fields of spring wheat in the beginning of shooting, of oats - in the phase of tillering, and of millet - at the start of the casting-out of the head the herbicide 2.4-D (I) per 1 kg/ha attacked the weeds successfully, increasing the harvests of wheat by 2, of oats by 3.5, of millet by 4 centners (in comparison with

Card 1/2

8

L 05117-67 JU/AT-50 EWT(1) RO

ACC NR: AP6030239 (AN) SOURCE CODE: UR/0394/66/004/007/0022/0027

AUTHOR: Merezhinskiy, Yu. G.; Mel'nichuk, A. S.; Martynenko, V. I.; Ushakova, L. T. 16 B

ORG: Ukrainian Scientific Research Institute of Agriculture (Ukrainskiy nauchno-issledovatel'skiy institut zemledeliya)

TITLE: Herbicides, 16 defoliation and dessication agents and plant growth regulators. Aftereffects of simazine and atrazine on weeds and crops

SOURCE: Khimiya v sel'skom khozyaystve, v. 4, no. 7, 1966, 22-27

TOPIC TAGS: herbicide, agriculture, simazine, atrazine/fodder beans, /ONK-B tractor sprayer

ABSTRACT: Experiments were conducted to determine the after-effects of simazine and atrazine on weeds and crops in areas bordering the Polesye region and the Ukrainian forest-steppe. It was found that simazine and atrazine preserve their toxicity in the soil for a year or more, and affect weeds and crops. The after-effects of the herbicides last a shorter time on light soils, poor in organic matter. Sugar beets, sunflowers, barley, and oats were found to be the most sensitive to simazine and atrazine in the second year after sprayings of 2 kg/ha

Card 1/2 UDC: 632. 954. 633

L 05117-67

ACC NR: AP6030239

and more. Millet, fodder beans, peas, lupine and potatoes were the most resistant. Atrazine maintains its toxicity for almost as long as simazine, but the effects of atrazine on crops are more evident, especially during years with insufficient precipitation, and in heavy soils, rich in organic matter. Corn, millet, fodder beans, peas, lupine, potatoes and flax may be sown on the second year after spraying with 2 kg/ha and even smaller doses of simazine and atrazine. Orig. art. has: 6 tables. [W.4.50] [GC]

SUB CODE: 02, 06/ SUBM DATE: 02Jul65/ ORIG REF: 021/

Card 2/2

STETSULA, V. I.; MEL'NICHUK~~, A.~~ V.; TRUTNEVA, A. V.

New method of producing experimental osteomyelitis. Eksper. khir. no.3:55-58 '62. (MIRA 15:7)

1. Iz patogistologicheskoy laboratorii (zav. - kandidat meditsinskikh nauk V. I. Stetsula) Sverdlovskogo nauchno-issledovatel'skogo instituta travmatologii i ortopedii (dir. - kandidat meditsinskikh nauk Z. P. Lubegina)

(OSTEOMYELITIS)

L 24900-65
ACCESSION NR: AR4047777 S/0299/64/000/018/M021/M021

SOURCE: Ref. zh. Biologiya. Svodnyy tom, Abs. 18M159

AUTHOR: Fishkin, V. I.; Gladkova, A. M.; Mel'nichuk, A. V.

3
B

TITLE: Accretion process characteristics of bone transplants 2 - free and on feeding muscular pedicles

CITED SOURCE: Ortopediya, travmatol. i protezir., no. 4, 1964, 22-24

25

TOPIC TAGS: dog, transplantation, bone graft, accretion, femur, vascularization

TRANSLATION: The behavior of free transplants and feeding transplants was compared in experiments on 17 dogs with replantation of the femur greater trochanter. The external wide muscle of the femur, from which arterial branches enter the greater trochanter, according to the authors, served as a feeding pedicle. A skeletized major trochanter from the opposite side served as a control for the feeding transplants. Postoperative observation periods were 7, 14, 21 days and 1, 2, 4, 6 and 12 mos. Due to preservation of the basic vascular

Card 1/2

L 24900-65
ACCESSION NR: AR4047777 O

network in the feeding transplants, new bone formation took place not only from the matrix side which is normal, but also from the transplant side, and normal bone structure was restored. Normalization of bone structure did not take place in the free transplants. Yu. Pashin

SUB CODE: LS ENCL: 00

Card 2/2

MEL'NICHUK, A.Ya.

28(1) PHASE I BOOK EXPLOITATION SOV/1606

Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki

Avtomatika i telemekhanika; sbornik (Automation and Telemechanics; Collection of Articles) Moscow, Izd-vo AN SSSR, 1958. 144 p. 5,000 copies printed.

Resp. Ed.: Ya.Z. Tsypkin; Ed. of Publishing House: V.A. Kotov; Tech. Ed.: I.N. Guseva.

PURPOSE: The book may be useful to engineers working with automatic and remote control.

COVERAGE: This is a collection of 15 articles which were presented at the fourth and fifth scientific and technical conferences of young members of the Institute of Automation and Telemechanics of the USSR Academy of Sciences. The fourth conference was held in 1955 and the fifth in 1956. The material contained in the articles is based on research work done by young members of the Institute.

Card 1/8

Automation and Telemechanics (Cont.) SOV/1606

The articles discuss automatic and remote control devices and the automated drive. No personalities are mentioned. References appear at the end of each article.

TABLE OF CONTENTS:

are Soviet (including 3 translations) and 1 English.

Mel'nichuk, A.Ya. Electromagnetic Frequency Signal Receivers With Coupled Vibrators 58

The author discusses the requirements imposed upon selectivity

Card 4/8

Automation and Telemechanics (Cont.) SOV/1606

characteristics of electromagnetic signal receivers and describes methods of designing and constructing a system of coupled mechanical vibrators. He also discusses a study of experimental signal receivers with coupled vibrators. There are 15 references, 12 of which are Soviet, 2 English, and 1 German.

MEL'NICHUK, A.Ya. (Moskva).

Chain matrix and equivalent circuit of the electromagnet-type electromechanical converter. Avtom. i telem. 20 no.1:79-84 Ja '59. (MIRA 12:1)
(Electric current converters) (Electric circuits)
(Matrices)

MEL'~~M~~NICHUK, A. YA., CAND TECH SCI, "INVESTIGATION OF RECEIVERS ~~OF~~ FREQUENCY SIGNAL~~,~~ with coupled ~~USING~~ DIPOLEs ~~ANTENNAS~~." MOSCOW, 1960. (MIN OF COMMUNICATIONS USSR, MOSCOW ELECtrical ~~TROTECH~~ Engineering INST OF COMMUNICATIONS). (KL, 3-61, 218).

235

L 43879-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) IJP(c) BC

ACC NR: AP6030620 SOURCE CODE: UR/0413/66/000/016/0110/0110

14

B

INVENTOR: Vorob'yeva, T. M.; Mel'nichuk, A. Ya.; Kruglov, V. N.

ORG: none

TITLE: Digital servo. Class 42, No. 185118

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 16, 1966, 110

TOPIC TAGS: servo system, logical element

14

ABSTRACT: This Author Certificate introduces a digital servo with a housing, a return electromagnet (spring mechanism), and electromagnets with reciprocating cores whose number is equal to the number of digits in a binary number; the air gaps between the cores are correspondingly equal to one, two, four, etc. units. To eliminate the intermediate electropneumatic (electro-hydraulic) converters and simplify the system, the electromagnets with the reciprocating cores are arranged in sequence in the non-magnetic housing so that their side surfaces touch the inner surface of the housing. [JR]

SUB CODE: 09/ SUBM DATE: 10Jun65/ ATD PRESS: 5075

Card 1/1 blg UDC: 681.142.07-525

MEL'NICHUK, E.V. [Mel'nychuk, E.V.]

Methods of petrochemical recalculation for determining the migration of elements during chemical weathering and metasomatic processes. Geol. zhur. 24 no.1:49-57 '64. (MIRA 18:7)

1. Pravoberezhnaya geologicheskaya ekspeditsiya tresta "Kiyevgeologiya".

MELNICHUK, G. L.

"Eggs and Larvae of the Bonito (Pelamys Sarda C. V.) In the North-Western art of the Black Sea," Dok. AN, 30, No. 6, 1941. Mbr., Sta. Marine Fisheries and Oceanog. Ukraine, Odessa. -c1941-. Mbr., Ukr. Sta. Marine Fisheries & Oceanography, Odessa,-1941-.

MEL'NICHUK, G.L., Cand Bio Sci—(diss) "Nutrition of young sturgeons in the lowlands of the Dunay and Dnepr and in the Dnepr estuary ~~[illegible]~~." Kiev, 1958. 16 pp (Acad Sci UkSSR. Dept of Bio Sci), 150 copies (KL,48-58, 122)

MEL'NICHUK, G.L. [Mel'nychuk, H.L.]

Feeding of young sturgeons in the lower Dnieper. Trudy Inst. gidrobiol. AN URSR no.34:208-214 '58. (MIRA 12:3)
(Dnieper River--Sturgeons) (Fishes--Food)

SOV/21-59-4-19/27

30(1)

AUTHOR: Mel'nichuk, G.L.

TITLE: Nutrition Conditions of Young Sturgeon in the Lower Reaches of the Danube and Dnepr Rivers

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1959, Nr 4, pp 424-428 (USSR)

ABSTRACT: Summing up the results of his own study of nutrition conditions of fry sturgeon in the lower reaches of the Danube and Dnepr rivers with the data contained in the works named in the bibliography reference, the author states that the principal food of sturgeon fry in the lower reaches of the Danube is juvenile oligochaetes (containing 85.8% of organic matter). The principal food of fry sturgeon in the lower reaches of the Dnepr river is juvenile gammaridae (containing 79% of organic matter). At the earlier stages of development, sturgeon fry is better provided with food in the Danube; at a later stage of

Card 1/2

SOV/21-59-4-19/27

Nutrition Codnitions of Young Sturgeon in the Lower Reaches of the Danube and Dnepr Rivers

development, in the Dnepr. There are 3 tables and 8 Soviet references.

ASSOCIATION: Institut gidrobiologii AN UkrSSR (Institute of Hydrobiology of the AS UkrSSR)

PRESENTED: By A.P. Markevich, Member of the AS UkrSSR

SUBMITTED: December 15, 1958

Card 2/2

MEL'NICHUK, G.L. [Mel'nychuk, H.L.]

Some problems of the biology of sturgeons in the lower reaches of rivers flowing into the northwestern part of the Black Sea. Nauk. zap. Od.biol. sta. no.3:117-123'61. (MIRA 16:6)
(DANUBE RIVER—STURGEONS) (DNIEPER RIVER—STURGEONS)

ZAYTSEVA, G.Ya.; MEL'NICHUK, G.L.

Feeding habits and food relations among fishes in Kakhovka Reservoir during the first years after its construction. Vop. ekol. 5:67-69 '62. (MIRA 16:6)

1. Institut gidrobiologii AN UkrSSR, Kiyev.
(Kakhovka Reservoir—Fishes—Food)

MEL'NICHUK, G.L., kand.biol.nauk

Feeding habits of young low-quality fishes in Kakhovka Reservoir. Gidrobiol.zhur. 1 no.5:29-34 '65. (MIRA 18:11)

1. Institut gidrobiologii AN UkrSSR, Kiyev.

1. I. A. MEL'NICHUK

2. USSR (600)

4. Bee Culture

7. Nuclei are one of the methods for increasing the honey production of bee colonies. Furmaniuk. Shor. stud. rab. Umansk. sel'khoz. inst. no. 1. 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

MEL'NICHUK, I.P.; CHERKASOV, V.V.

Effect of certain factors on penetration rate. Burenie no.9: 24-27 '65. (MIRA 18:10)

1. TSentral'nyy nauchno-issledovatel'skiy institut tekhniko-ekonomicheskikh issledovaniy po neftyanoy, neftekhimicheskoy i gazovoy promyshlennosti.

FOKEYEV, V.M.; MEL'NICHUK, I.P., aspirant

Some reasons for a change in the mechanical properties of rocks in case of thermal action and subsequent cooling. Izv. vys. ucheb. zav.; geol. i razv. 6 no.5:134-139 My '65. (MIRA 18:10)

1. Moskovskiy geologorazvedochnyy institut imeni Ordzhonikidze.

MEL'NICHUK, L. P.; BROUN, Zh. L.; CHIBISOV, K. V.

Localization of the topochemical reaction during the rapid aging of photographic emulsions. Zhur.nauch.i prikl.fot. i kin. 6 no.4:301-304 Jl-Ag '61. (MIRA 14:11)

1. Institut fiziki Odesskogo universiteta imeni I. I. Mechnikova i Kafedra uchebnoy i nauchnoy fotografii i kinematografii Moskovskogo universiteta.

(Photographic emulsions)

MEL'NICHUK, L.P.; BROUN, Zh.L.

Gold sensitizing of the Lippman emulsion. Zhur.nauch.i prikl.fot.i kin. 7 no.6:465-467 N-D '62. (MIRA 15:12)

1. Nauchno-issledovatel'skiy institut fiziki pri Odesskom gosudarstvennom universitete imeni I.I. Mechnikova.

(Photographic emulsions)

ACCESSION NR: AP4013973 S/0077/64/009/001/0038/0046

AUTHORS: Broun, Zh. L.; Varshaver, B. G.; Mel'nichnuk, L. P.; Chibisov, K. V.

TITLE: Interaction investigations between spectral sensitivity and admixture spectral absorption of photographic emulsions

SOURCE: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 9, no. 1, 1964, 38-46

TOPIC TAGS: spectral sensitivity, photographic emulsion, silver bromide, admixture center, gold sensitizer, discrete bands

ABSTRACT: The possible existence of a discrete character in the spectral sensitivity of an optically unsensitized photographic emulsion has been studied. First, the magnitude of relative spectral sensitivity $S'_{\lambda} = H_{\lambda}, {}_{0}H_{\lambda},{}_{t}$ (H_{λ} - energy of monochromatic radiation) is calculated for various values of λ and, secondly, a silver bromide Lieppman emulsion is used to observe carefully the thin structure of the admixture center spectra, using the differential method with a gold sensitizer. The spectrosensitometer ISP-73 is used to determine S_{λ} in the wave-length interval 420-700 mμ. It is shown that the admixture spectral sensitivity is distributed in

Card 1/2

ACCESSION NR: AP4013973

discrete bands both in the limits of fundamental absorption of silver halogenide and in the long wave-length region, with a spectral position corresponding to thin structured bands of the admixture spectra. A discussion is given on the role played by these centers on the emulsion layer under the action of light. "The authors are grateful to Professor Ye. A. Kirillov for evaluating this work." Orig. art. has: 6 figures and 2 tables.

ASSOCIATION: Odesskiy gosudarstvenny*y universitet im. I. I. Mechnikova (Odessa State University); Vsesoyuzny*y nauchno-issledovatel'skiy kinofotoinstitut (NIKFI) (All-Union Scientific Research Motion Picture Institute)

SUBMITTED: 13Nov62 DATE ACQ: 14Feb64 ENCL: 00

SUB CODE: PG NO REF SOV: 017 OTHER: 003

Card 2/2

PYATNITSKAYA, A.B.; MEL'NICHUK, L.P.; BROUN, Zh.L.; CHIBISOV, K.V.

Evolution of additives' centers during the process of after-ripening and accelerated aging of photographic emulsions. Part 1: Changes in the spectral absorption during chemical ripening and accelerated aging. Zhur. nauch. i prikl. fot. i kin. 9 no.5:321-327 S-O '64. (MIRA 17:10)

1. Odesskiy gosudarstvennyy universitet imeni Mechnikova.

MEL'NICHUK, L.P.; BROUN, Zh.L.

Studying the chemical sensibilization with gold. Part 1. Effect of simple and complex gold salts on the Lippman emulsion. Zhur.nauch.i prikl.fot. i kin. 10 no.3:178-181 My-Je '65. (MIRA 18:11)

1. Nauchno-issledovatel'skiy institut fiziki Odesskogo gosudarstvennogo universiteta imeni I.I.Mechnikova.

MEL'NICHUK, L.F.; BROUN, Zh.L.

Study of the chemical sensitization with gold. Part 2. Sensitizing by means of the introduction of gold salts to the Lippmann emulsion or by the bathing of its finished films. Zhur. nauch. i prikl. fot. i kin. 10 no.4:258-[illegible] Jl-Ag '65. (MIRA 18:7)

1. Nauchno-issledovatel'skiy institut fiziki Odesskogo gosudarstvennogo universiteta imeni Mechnikova.

L 05873-67 EWT(1) GD

ACC NR: AT6020426 (N) SOURCE CODE: UR/0000/65/000/000/0073/0081

31

AUTHOR: Kubyshin, B. Ye.; Mel'nichuk, L. P.

ORG: Institute of Electrodynamics AN UkrSSR (Institut elektrodinamiki AN UkrSSR) B+1

TITLE: A method for increasing the Q-factor of a magnetic amplifier 25

SOURCE: AN UkrSSR. Preobrazovaniye i stabilizatsiya elektromagnitnykh protsessov (Conversion and stabilization of electromagnetic processes). Kiev, Naukova dumka, 1965, 73-81

TOPIC TAGS: Q factor, magnetic amplifier, time constant, electronic feedback

ABSTRACT: A method is proposed for reducing the time constant of magnetic amplifiers used in automatic control systems. Analysis of the relationship between the time constant and magnetic coupling with the feedback and bias circuits in an ordinary magnetic amplifier with external feedback shows that the time constant of the amplifier is determined by the time constant of the control circuit, the parameters of the bias and feedback circuits which are magnetically coupled to the control circuit, and also the amplification factor. A system is described for constructing a magnetic amplifier without feedback and with three independent control circuits, or a magnetic amplifier with external feedback and inductively decoupled control, feedback and AC circuits. The dynamic characteristics of amplifiers incorporating this system are experimentally studied. The results show that this system may be used for increasing the amplification factor with a simultaneous reduction in the time constant to give a Q increase by a factor of approximately 8. Orig. art. has: 4 figures, 8 formulas.
KH

SUB CODE: 09/ SUBM DATE: 26Oct65/ ORIG REF: 004/ OTH REF: 001

Card 1/1

L 07170-67 EWT(1) IJP(c)

ACC NR: AT6029515 (A) SOURCE CODE: UR/3180/66/011/000/0022/0028

AUTHOR: Broun, Zh. L.; Mel'nichuk, L. P.

,26

13+1

ORG: none

20

TITLE: Effect of chemical sensitization on the impurity spectral photosensitivity

SOURCE: AN SSSR. Komissiya po khimii fotograficheskikh protsessov. Uspekhi nauchnoy fotografii, v. 11, 1966. Khimiya fotograficheskikh emul'siy. Strukturnyye svoystva fotograficheskikh sloyev (Chemistry of photographic emulsions. Structural properties of photographic films), 22-28

TOPIC TAGS: photographic emulsion, impurity center, photosensitivity

ABSTRACT: The purpose of the work was to extend data obtained earlier on the discrete nature of the impurity spectral photosensitivity by studying the spectrosensitometric properties of a Lippmann silver bromide emulsion chemically sensitized with hydrazine and thiourea, and also with salts of inert metals. The following characteristics common to all cases were observed: presence of discrete bands of impurity spectral photosensitivity, coincidence of the positions of these bands with the maxima of impurity spectral absorption, steeper increase of the sensitivity in the longwave region ($\lambda < 460$ mμ) than in the shortwave region. Comparison of all the experimental data shows that there is no fundamental (qualitative) difference in the photographic action of the various chemical sensitizers. All the processes of chemical sensitization

Card 1/2

L 07170-67

ACC NR: AT6029515

studied lead to the formation of impurity centers from the corresponding metals, probably under the influence of the reducing function of gelatin. These centers then participate in the creation of the photosensitivity of the photographic emulsion. Authors thank M. A. Bart, who took part in the experimental part of the work. Orig. art. has: 4 figures and 1 table.

SUB CODE: 14/ SUBM DATE: none/ ORIG REF: 020

Card 2/2 nz

MEL'NICHUK, M.

BRATERSKIY, F.; MEL'NICHUK, M.

Determining mineral impurities in flour. Khleb. i kond. prom.
1 no.4:41 Ap '57. (MLRA 10:5)

1. Khlebokombinat (Priluki).
(Flour)

AUTHOR: Mel'nichuk, M.I. SOV-132-58-9-7/18

TITLE: Experiments on Measuring the Second Derivatives of the Magnetic Potential of Ore Bodies (Opyt provedeniya rabot po izmereniyu vtorykh proizvodnykh magnitnogo potentsiala tel)

PERIODICAL: Razvedka i okhrana nedr, 1958, Nr 9, pp 26 - 32 (USSR)

ABSTRACT: The Chair of Geophysics of LPI (The L'vov Polytechnical Institute) carried out experiments on the utilization of second derivatives (gradients) of the magnetic potential of ore bodies for the solution of problems in geological prospecting. The magnetometer MP-1, devised by the Ural Branch of the AS USSR, and IMA M-1, devised by the Institut mashinovedeniya i avtomatiki AN USSR (The Institute of Machine Engineering Science and Automation of the AS USSR), were used in the experiments. Detailed graphical and analytical calculations, as well as a description of the proceeding, are given. It was found that the method of gradients could be used for a detailed prospecting for minerals when the disturbing body is at shallow depths. Its dimensions and location as to depth can be determined by the degree of the decrease of the gradient. This method is especially important for the prospecting of geologically complex ore fields, where the presently used method of magnetic prospecting does not

Card 1/2

SOV-132-58-9-7/18

Experiments on Measuring the Second Derivatives of the Magnetic Potential of Ore Bodies

give positive results.
There are 2 graphs and 3 Soviet references.

ASSOCIATION: L'vovskiy politekhnicheskiy institut (The L'vov Polytechnical Institute)

1. Ores--Magnetic properties 2. Geophysical prospecting --Applications

Card 2/2

14(5); 28(5) SOV/151-58-11-12/15

AUTHOR: Mel'nichuk, M.I.

TITLE: Possibilities of Using the Gradient Method in Magnetic Prospecting

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Geologiya i razvedka, 1958, Nr 11, pp 81-100 (USSR)

ABSTRACT: Since graphs of magnetic field components obtained by magnetic prospecting reflect the distribution of magnetic field elements only in a general manner, the necessity arises to differentiate the magnetic field and to identify local anomalies developed by individual bodies. To solve this problem the gradient method was suggested, consisting in the computation of second derivatives of the magnetic potential with respect to the distribution of anomalies composing the magnetic field intensity. However, due attention has as yet not been paid to the gradient method. The article shows some possibilities of mineral prospecting by investigating the regularities of distribution in space of second derivatives of the magnetic potential. The author presents the solution of a direct and a reverse problem relating to some two-dimensional bodies in oblique and vertical magnetization and presents the results of investigations of iron-ore fields in the Krivoy Rog and Kremenchug areas. Measurements of the

Card 1/3